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REMARKS

Favorable reconsideration of this application is requested. Claims 1, 3 and 13 are pending in the application. Claim 1 has been clarified to confirm that at least one of aluminum and aluminum oxide is present in the electrode. Claim 3 has been clarified so that the definition of X is consistent with the earlier recitation in the claim that elemental Au is present. Claim 13 is supported for example in Table 1 on page 11, in which numerous examples include larger amounts of AuAl₂ than the other Au-Al alloys. These alloys provide superior current output ratios to those seen with alloys including relatively large amounts of the other Au-Al alloys.

Claims 1 and 3 were rejected as anticipated by EP 1041380 (EP '380). Applicants respectfully traverse this rejection. The rejection contends that the inclusion of AuAl₂ in the reference meets the requirements of claims 1 and 3. However, claim 1 requires the presence of at least one of elemental Al and aluminum oxide. As the reference does not disclose the presence of these materials, the anticipation rejection should be withdrawn.

The reference also fails to suggest the invention of claim 1. The reference discloses that an Al-Au intermediate layer is desirable in order to prevent reductions in hydrocarbon detection ability when the oxygen concentration is high. The reference in no way suggests the present invention, where controlling the amount of elemental Al and aluminum oxide present in an electrode provides the advantage of improved heat resistance. Therefore, claim 1 is not obvious over the reference.

Claims 3 and 13 are even further removed from the reference. Claim 3 requires that elemental Au is present. Nothing in the reference suggests that the presence of elemental Au would provide any benefit to the reference's indicated purpose of reducing the degradation of

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hydrocarbon detection ability in the presence of high oxygen concentrations. With respect to claim 13, nothing in the reference suggests that the presence of the AuAl2 alloy in larger amounts than the other Au-Al alloys would provide any advantages such as improved current output ratios. Therefore, the reference fails to suggest the inventions of claims 3 and 13.

Claims 1 and 3 were rejected for obviousness double patenting over parent US 6,638,406 in view of EP '380. Applicants respectfully traverse this rejection. The use of EP'380 in this rejection is similar to its use in the rejection discussed above. As noted above, that rejection's reliance on EP'380 is incorrect, and therefore the double patenting rejection should be withdrawn for at least the same reasons.

Applicants note the 1449 submitted with the IDS dated August 27, 2003 lists the parent application number (09/976,196) at the top instead of the continuation application number (10/649,012).

In view of the above, favorable reconsideration in the form of a Notice of allowance is requested. If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicants' primary attorney-of record, Douglas P. Mueller (Reg. No. 30,300), at (612) 455.3804.

Respectfully submitted,

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